

FOREIGN DIRECT INVESTMENT

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INTRODUCTION AND SUMMARY

The value of firms located abroad but owned by Danish firms is known as foreign direct investment (FDI).¹ Over the last 30-40 years, the extent of FDI has expanded rapidly, both globally and in Denmark, driven, inter alia, by easier and cheaper access for firms to set up in markets other than their home market. This has enabled them to expand more than if they operated solely within the borders of a single country.

Developments in Denmark are similar to developments in other advanced economies. However, since the mid-2000s, growth in Danish FDI abroad has exceeded growth in FDI in Denmark, entailing that the Danes have accumulated large net FDI stocks. This reflects, inter alia, that Denmark has been running large current account surpluses for some time, thereby accumulating foreign assets. Moreover, countries with positive net stocks tend to be wealthy advanced economies.

Very large Danish firms, especially in the industrial sector, are the main Danish investors abroad. Thus, in 2014, the 10 largest groups accounted for about half of Denmark's FDI stocks. Danish FDI abroad is concentrated in a few countries, primarily Danish trading partner countries. The country composition is very stable, illustrating that FDI represents long-term economic relations.

FDI generates substantial investment income. For each year in the past decade, Danish FDI abroad have been generating a higher rate of return than the return on FDI in Denmark. The difference is attributable, in particular, to Danish pharmaceuticals with patents registered in foreign subsidiaries, which generate high earnings relative to the investment. Excluding the pharmaceutical industry, there is no systematic difference in the rate of return.

When Danish firms engage in FDI, this could, in principle, be at the expense of domestic real capital investment. However, this does not seem to be the case. Danish real capital investment in industries and firms with FDI stocks does not differ from that in other industries and firms. This applies in the short term. But in the longer term, FDI abroad is not assessed to crowd out domestic investment to any substantial extent either.

1 Foreign Direct Investment (FDI). The abbreviation is used in charts in the article. Changes in stocks as a result of transactions are referred to as outward or inward, depending on whether FDI flows out the country or into the country.

FOREIGN DIRECT INVESTMENT (FDI)

FDI is the value of firms located abroad in which the investor has controlling influence, cf. Box 1. The activity of foreign subsidiaries can be related to production facilities, port terminals, sales offices, etc. Tax optimisation could be another motive for setting up firms abroad. In other words, FDI is a broad concept. In some cases, FDI is comparable to real capital investment, in others FDI is more similar to a financial investment. Statistically, FDI is not decomposed into subgroups depending on the activity of foreign subsidiaries. Thus, it is not possible to determine whether FDI covers e.g. the construction of a new plant, i.e. greenfield investment, mergers & acquisitions or something else altogether.

INTERNATIONAL FDI DEVELOPMENT

The global scope of FDI has been expanding rapidly since 1980, cf. Chart 1 (left) – especially during the periods 1994-99 and 2003-06, i.e. periods of strong global growth. The explanation is easier and cheaper access for firms to set up in markets other than their home market. This enables them to expand more than if they operated solely within the borders of a single country. Moreover,

setting up production facilities and sales offices abroad can be necessary to achieve market access. In addition, this facilitates access to new knowledge and technology.

The rise in FDI stocks is driven by the advanced economies in particular, although the FDI share of emerging market economies has increased since the millennium change. From the early 1980s until the mid-2000s, the advanced economies accounted for about 90 per cent of global FDI stocks, slightly more than their share of the global gross domestic product, GDP. Since then, the share of FDI stocks has decreased to just under 80 per cent, while their share of global GDP has been reduced to 60 per cent.

The advanced economies have primarily invested in other advanced economies, reflecting, inter alia, that global corporate structures have become more complex, cf. Box 2. This entails that the net investment of the advanced economies is far lower than their gross investment, cf. Chart 1 (right).

DANISH FDI

Developments in Danish FDI are similar to developments in other advanced economies. Both

FDI in the national accounts and seen from the perspective of firms

Box 1

FDI in the national accounts

In the national accounts, stocks of FDI abroad are defined as a financial item covering the value of firms located abroad in which the Danish investor has controlling influence. The specific limit is set at 10 per cent of the equity or voting rights. Thus, the foreign subsidiaries of Danish groups are included in the national accounts as part of Danish FDI abroad. Technically, this figure is included as a foreign asset, i.e. a receivable. Changes in FDI abroad can be due to changes in value or volume.

Ownership is achieved through acquisition by Danish firms of equity securities issued by foreign firms. This entails that, in the national accounts, FDI is regarded as a cross-border financial investment and recorded in the financial account of the balance of payments. FDI also includes loans and trade credits between affiliated enterprises, for instance from the parent company to a foreign subsidiary.

FDI can be calculated using two approaches: the directional approach and the balance of payments approach. In the calculation of FDI stocks, the difference between the two approaches is that intercompany loans are calculated net per country using the directional approach, while gross figures are used in the balance of payments approach. This means that the gross figures calculated using the direction-

al approach could be smaller. In the article, we use both approaches, depending on the data available.

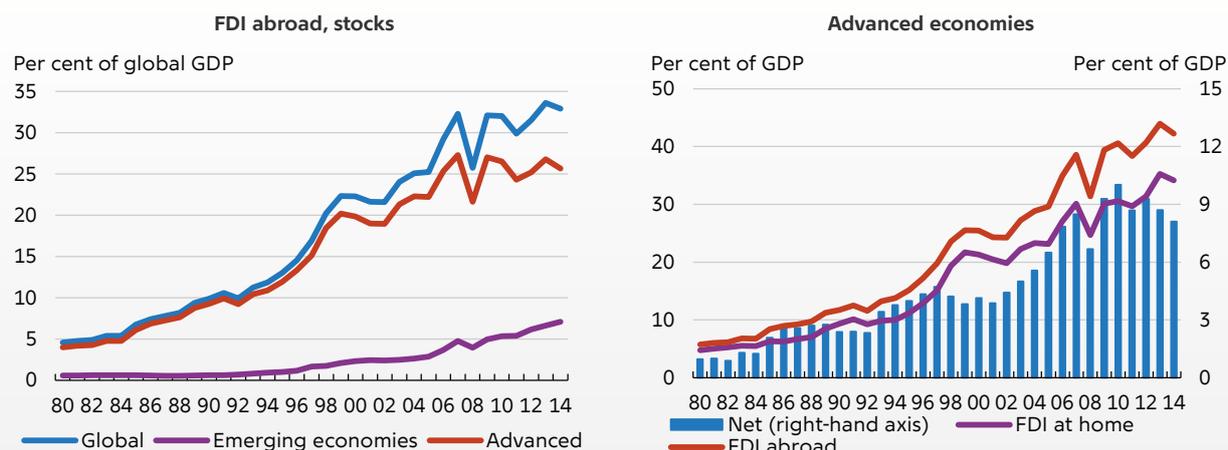
The value of FDI is subject to some uncertainty, for instance because it is difficult to determine the market value of firms that are not listed and thus not traded in a market.

FDI seen from the perspective of firms

Firms plan production and sales to achieve profit maximisation. Consequently, they will operate from abroad if they find this advantageous. In some cases, geographical borders will be insignificant to them. As a case in point, an IT server or a patent registered abroad may be used by employees in Denmark. In principle, certain activities conducted by foreign subsidiaries could be performed in Denmark such as the production of goods or intermediate inputs. However, in many cases, it is physically impossible to locate the subsidiary in Denmark, for example when it comes to US port installations. Similarly, sales offices abroad are typically set up to be closer to the customers. Another constraint could be the availability of spare resources in the Danish labour market. With unemployment close to its structural level, the amount of spare resources is limited, cf. Danielsen and Jørgensen (2015). Finally, foreign subsidiaries may be set up for liquidity management or tax optimisation reasons.

FDI stocks

Chart 1



Note: Left-hand chart: Calculated using the directional approach. Percentage of global GDP in current prices and market exchange rate. Emerging economies are calculated as the world excluding advanced economies. Right-hand chart: Calculated using the directional approach as the percentage of GDP in advanced economies in current prices and market exchange rate. Gross figures are calculated as the cross-country sum of stocks. "Net" represents the difference between outward and inward FDI.

Source: United Nations Conference on Trade and Development, Unctadstat.

Danish FDI abroad and FDI in Denmark have risen sharply over the last decades, cf. Chart 2 (left). Since the mid-2000s, Danish FDI abroad have, however, exceeded FDI in Denmark. Thus, the Danes have accumulated large net FDI stocks.

Danish FDI abroad grew particularly strongly in the period 2008-11, while growth in FDI in Denmark was weaker. The primary reason was large individual transactions. As a case in point, Carlsberg acquired Scottish & Newcastle in partnership with Heineken in 2008, substantially increasing Danish FDI abroad. At the same time, non-resi-

dents have been selling firms in Denmark. Multiple sales of Chr. Hansen Holding, ISS and TDC are examples of large transactions that have reduced FDI in Denmark.

There does however, not seem to be any major structural explanations for Denmark's large accumulation of net stocks. For example, the OECD constructs an index of regulatory restrictions on FDI, the FDI Regulatory Restrictiveness Index. According to this index, Danish regulatory barriers are low and below the OECD average (slightly higher than e.g. Germany and the Netherlands,

Global value chains and FDI¹

Box 2

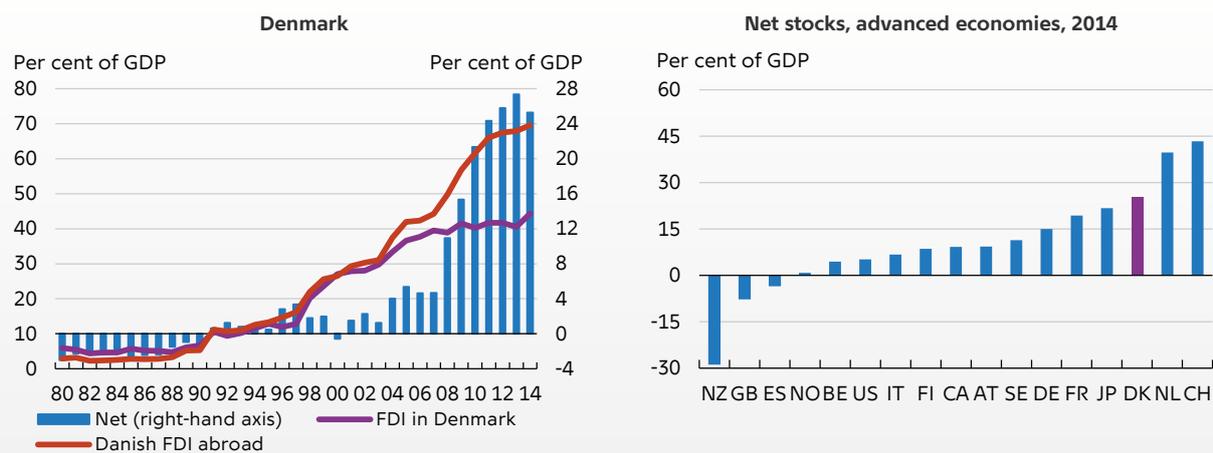
Firms are increasingly using subcomponents from other firms, sometimes their own subsidiaries, in the production of goods. When activities are distributed among firms, several firms are involved in the value chain of a product. Thus, the value of the final product may consist of value added from a variety of firms. If value added is generated in a number of countries, a global value chain is created. A long value chain tends to lead to higher global exports, since the entire value of the product/intermediate input is included in the calculation of exports each time a national border is crossed.

Globalisation has manifested itself, in particular, in longer global value chains and more FDI. However, FDI may, in itself, lengthen global value chains. If a Danish firm decides to relocate part of its production process abroad, this will lengthen the value chain of the final product (production will be made by two firms rather than one). According to the UN, multinational corporations account for around 80 per cent of global trade, and approximately 33 per cent of the trade is carried out within the same group.²

1. See the article "Global value chains" in this Monetary Review for a description of GVC.
2. See United Nations Conference on Trade and Development, Unctad, press release 001, 2013, (<http://unctad.org/en/pages/PressRelease.aspx?OriginalVersionID=113>).

FDI stocks

Chart 2



Note: Left-hand chart: Calculated based on the balance of payments approach, excluding pass-through investment. Data before 1999 is from UNCTAD, while subsequent data is from Danmarks Nationalbank, which migrated to a new data collection system in 2004. NZ: New Zealand, GB: UK, ES: Spain, NO: Norway, BE: Belgium, US: USA, IT: Italy, FI: Finland, CA: Canada, AT: Austria, SE: Sweden, DE: Germany, FR: France, JP: Japan, DK: Denmark, NL: Netherlands, CH: Switzerland.

Source: Danmarks Nationalbank, OECD and UNCTAD.

but slightly lower than e.g. Sweden, Austria and the USA).² Moreover, the return on FDI in Denmark has not been low relative to the return in other countries either, cf. Kramp et al. (2014).

Cross-border corporate expansion in the advanced economies has been the main driver of growth in both Danish FDI abroad and FDI in Denmark. However, this development does not help to explain why Denmark and many other advanced economies have more FDI abroad than foreigners have FDI at home, i.e. why they have accumulated positive net stocks relative to the rest of the world, cf. Chart 2 (right). Rather, this reflects, inter alia, that FDI seeks the highest return. The return tends to be highest where the capital stock is smallest. Free capital flows mean that net FDI flows tend to go from countries with a high per capita income to countries with a lower per capita income, cf. Chart 3 (left) to such an extent that the cross-country return is largely the same when risk is factored in.

The main accumulators of large net FDI stocks are countries that have been running current account surpluses for many years, cf. Chart 3 (right).

Denmark's current account surplus means that the Danes – i.e. the domestic sectors taken as one – have a net savings surplus. Thus, Danes invest assets abroad. Some of these assets are invested in outward FDI. The Danes' net FDI stocks are in line with the Danish level of wealth and current account surpluses in recent years.

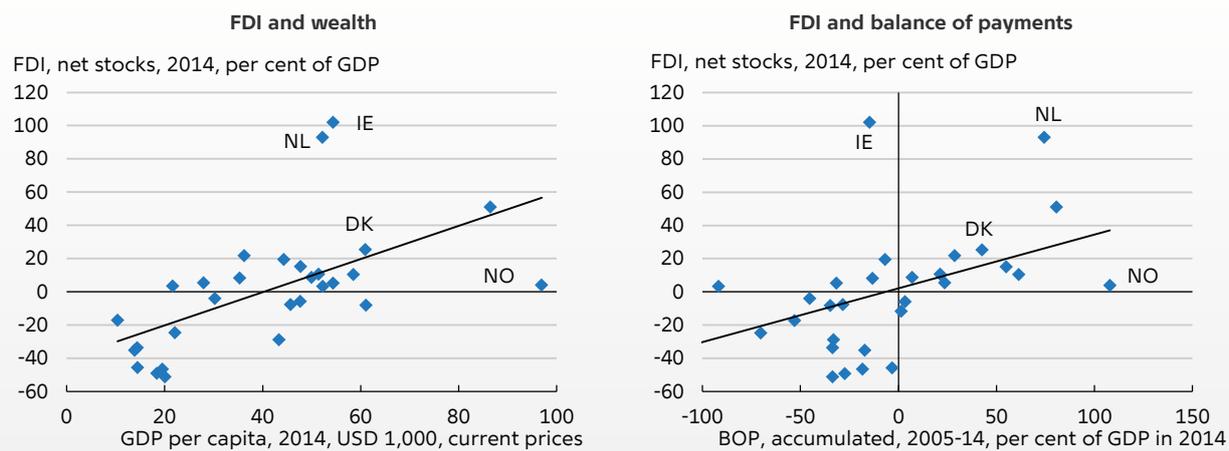
However, this does not apply to Ireland, the Netherlands and Norway. In the case of Ireland, the reason is that many international corporations are headquartered in Ireland. Their assets increase the Irish FDI abroad, while the liabilities are not included as FDI in Ireland since just a few investors hold more than 10 per cent of the share capital. Instead, the liabilities are classified as portfolio investment.³ The Netherlands is also the domicile of many large global corporations, which points to large net stocks if any foreign owners have an ownership interest of less than 10 per cent. Norway, on the other hand, has small net FDI stocks. The Norwegian current account surplus is largely oil driven. The revenue is invested in the Government Pension Fund, which mainly has portfolio investments. Thus, Norwegian outward FDI is relatively small.

² The Danish Productivity Commission (2013) has one recommendation, i.e. that "The industry-specific regulation is reviewed for the purpose of simplification and adaptation to the regulation of our key trading partners. As part of this review, ownership restrictions should, as far as possible, be removed."

³ See Central Statistics Office (2015).

Relationship between net FDI stocks, wealth and balance of payments

Chart 3



Note: Data is shown for 30 OECD countries. DK: Denmark, IE: Ireland, NL: Netherlands and NO: Norway. In a regression in which wealth and the accumulated balance of payments are both used as explanatory variables, the accumulated balance of payments is not significant. The explanation is that the level of wealth also helps to explain the size of a country's balance of payments (capital seeks the highest return).
Source: OECD and own calculations.

Danish FDI abroad broken down by country

At end-2014, Denmark's FDI abroad were kr. 1,351 billion excluding pass-through investment in Denmark, equivalent to 70 per cent of GDP. Danish FDI is concentrated in a few countries, and the country composition widely reflects Danish trading patterns, i.e. we invest in our trading partners, cf. Table 1. At end-2014, approximately 75 per cent of the FDI abroad was invested in just 10 countries. As far as FDI in Denmark is concerned, the 10 largest investor countries account for about 85 per cent. The countries targeted by Denmark for investment, and the countries targeting Denmark for investment are largely the same. Moreover, the country composition has been very stable over time, highlighting that FDI represents long-term economic relations.

Almost 60 per cent of Danish FDI goes to EU member states, especially Sweden, the UK, Germany and the Netherlands. The large Swedish share is attributable to the recording method where FDI abroad is recorded for the first counterparty country. Carlsberg's investments

in Russia are owned through Swedish subsidiaries, and in the statistics these investments are recorded as an investment in Sweden. The large stock of Danish FDI in Singapore is due, among other factors, to Maersk-owned port facilities in the country.

Other EU member states account for just under 70 per cent of FDI in Denmark, more than 20 per cent of which comes from the Netherlands and Luxembourg. These two countries are often used by firms to pass through investment from one country to other countries.⁴ With the adoption of the new IMF standard for balance of payments statistics, it became possible, starting in 2014, to allocate inward FDI to the ultimate investor country rather than the first counterparty country. Using this method, less than one third of the investment from the Netherlands and Luxembourg is actually controlled by their residents. Instead, a large portion of the final owners are from the USA and the UK, for instance through ownership via investment banks, private equity funds, etc., domiciled in these countries.

4 Some countries, for example Luxembourg and the Netherlands, have a high level of pass-through investment, inter alia as a result of favourable tax regimes. Pass-through investment is usually excluded from analyses if possible, as pass-through investment has no real economic effect. However, fully identifying pass-through investment is difficult, which makes cross-country comparisons of gross figures difficult.

Danish FDI stocks and trade broken down by country, average 2005-14

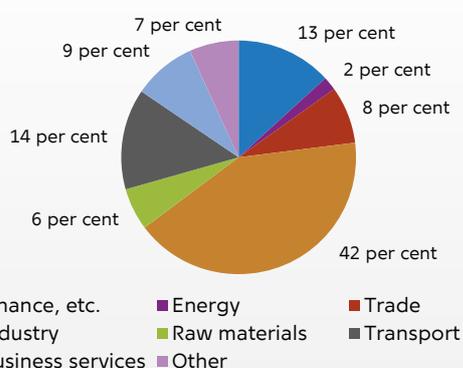
Table 1

Per cent	FDI abroad	Export share	Per cent	FDI in Denmark	Import share
Sweden	17.3	12.9	Sweden	24.2	13.3
USA	9.9	5.2	Netherlands	12.1	7.0
UK	9.8	8.0	Luxembourg	10.0	0.3
Germany	8.5	15.4	UK	7.9	5.4
Norway	6.1	6.2	USA	6.9	3.0
Netherlands	6.0	4.3	Norway	6.7	5.0
Switzerland	5.3	0.8	Germany	6.5	20.9
Singapore	3.8	0.6	Switzerland	4.0	0.9
France	3.8	3.6	France	2.9	3.5
Finland	3.6	2.5	Japan	2.5	0.6
10 largest countries	74.1	59.4	10 largest countries	83.6	60.0

Note: Data is shown for 30 OECD countries. DK: Denmark, IE: Ireland, NL: Netherlands and NO: Norway. In a regression in which wealth and the accumulated balance of payments are both used as explanatory variables, the accumulated balance of payments is not significant. The explanation is that the level of wealth also helps to explain the size of a country's balance of payments (capital seeks the highest return).
Source: OECD and own calculations.

Stocks of Danish outward FDI, industries, 2014

Chart 4



Note: Investment through non-financial holding companies is broken down by the industries in which the group operates. Non-disclosed industry is distributed equally among the other industries.

Source: Danmarks Nationalbank.

Danish FDI abroad broken down by industry

A large share of Danish FDI abroad is made by industrial firms, accounting for 42 per cent of Danish FDI abroad in 2014, cf. Chart 4.⁵ More than half of the industrial sector's investment is made in foreign industrial firms, primarily in the food, beverage and tobacco industry. The rest of the industrial sector's investment is made almost exclusively in non-financial holding companies. It is unclear where the capital is subsequently channelled to, but presumably it is widely channelled to industrial firms. Other Danish industries also mainly invest in their own industry, the industrial sector and non-financial holding companies when investing abroad.

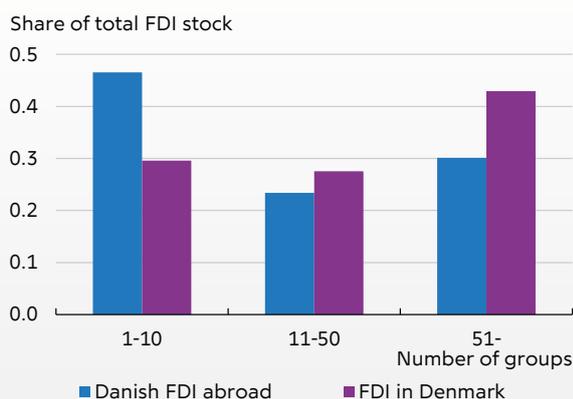
Firm size and FDI

It applies to both Danish FDI abroad and FDI in Denmark that subsidiaries are primarily fully owned, i.e. have only one owner. The value of FDI is distributed on a few Danish firms, cf. Chart 5. This is true for both Danish FDI abroad and FDI in Denmark.

⁵ Around 20 per cent of Danish FDI abroad is made through non-financial holding companies. However, this percentage can be distributed on the industries in which the group operates, which approach has been used in this article.

Groups' accumulated share of FDI stocks, 2014

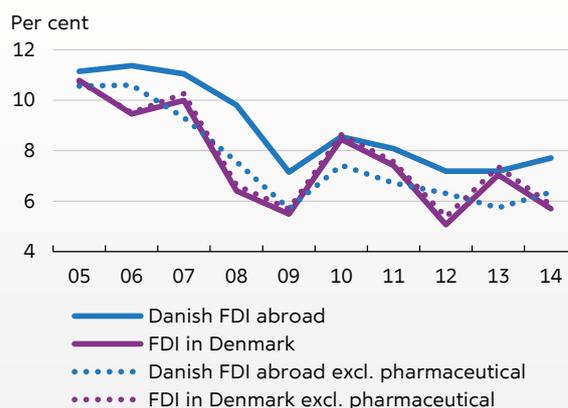
Chart 5



Anm.: Groups broken down by the size of their inward and outward FDI. 1-10 are the 10 groups with the largest FDI stocks, etc.
 Kilde: Danmarks Nationalbank.

Annual return on FDI stocks, Denmark

Chart 6



Note: Rates of return are calculated excluding pass-through investment as the profit in per cent of the year's average equity holding.
 Source: Danmarks Nationalbank.

At end-2014, the 10 largest groups accounted for just under 50 per cent of Danish FDI abroad, and the 50 largest groups accounted for 70 per cent, cf. Chart 5. In 2014, FDI in Denmark was kr. 860 billion, and, contrary to Danish FDI abroad, was distributed on multiple firms. The 10 largest foreign investors hold 30 per cent of FDI in Denmark, while the 50 largest investors hold 57 per cent.

RETURN ON FDI

FDI generates investment income from the foreign capital. For equity investments, the income is equal to the profit of subsidiaries, defined by distributed and undistributed dividends, while for intercompany loans the income consists of interest payments.

For the last decade, Danish FDI abroad have consistently generated a higher return than the return on FDI in Denmark, cf. Chart 6. One explanation for the difference is Danish pharmaceuticals, which, e.g. through patents registered abroad, generate a high level of earnings relative to the investment. If the pharmaceutical industry is disregarded, there is no systematic difference in the return on Danish FDI abroad and FDI in Denmark.⁶

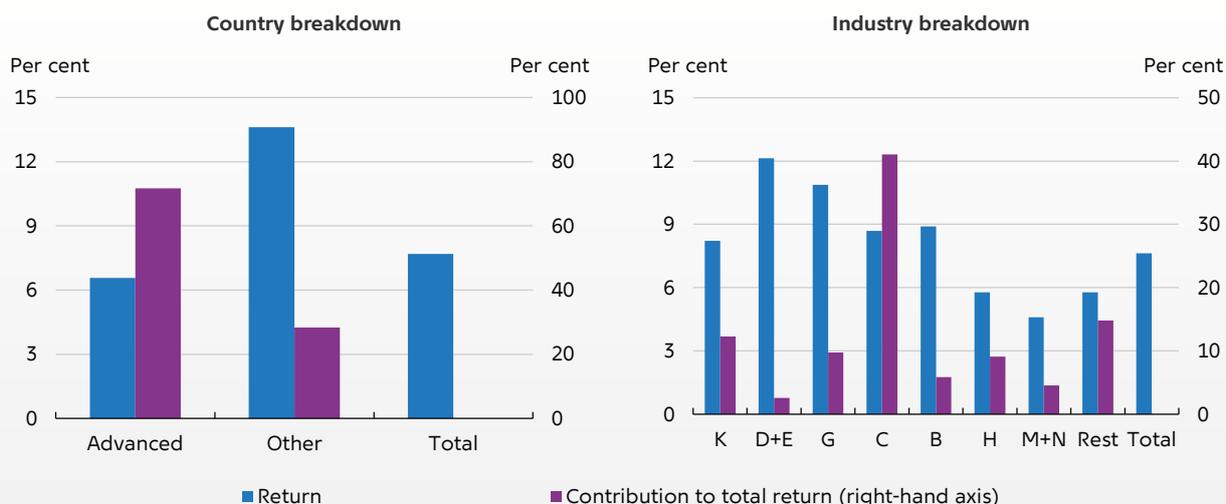
In the period 2009-14, the average annual return on Danish FDI abroad was 7.6 per cent. Broken down by country, the advanced economies contribute the most, at just over 70 per cent, while other countries contribute the remaining approximately 30 per cent, cf. Chart 7 (left). Among the advanced economies, Switzerland, the UK and Sweden are the main contributors to income. The return on investment in advanced economies is 6.6 per cent. Among other economies, the return is approximately double this figure. Investment in other economies is more risky and therefore generates a higher return, which could explain the difference.

Broken down by industry, the industrial sector is the main driver of the total return, accounting for 41 per cent. The return in the industrial sector is 8.7 per cent, cf. Chart 7 (right). The high return is attributable to the pharmaceutical industry, among others, accounting for about half of industry's contribution to the total return. This is remarkable as the pharmaceutical industry's FDI abroad accounts for just about 15 per cent of the investment in the industrial sector taken as one. The large contribution reflects that the return in the pharmaceutical industry was almost 37 per cent annually in the period 2009-14.

⁶ See also Andersen et al. (2013).

Annual return from Danish FDI abroad, countries and industries, 2009-14

Chart 7



Note: Non-financial holding companies are broken down by their typical target industries for investment. The industry abbreviations are as follows. K is Finance and insurance. D+E are energy supply, water supply and refuse collection. G is trade. C is industry. B is raw material extraction. H is transport. M+N are knowledge services, travel agencies, cleaning and other operational services. Rest is other industries. Total is all industries taken as one.

Source: Danmarks Nationalbank.

DOES OUTWARD FDI AFFECT DOMESTIC REAL CAPITAL INVESTMENT?

In the last 20-25 years, the investment ratio of the advanced economies has been showing a gradual decrease, cf. Chart 8, while the ratio has been

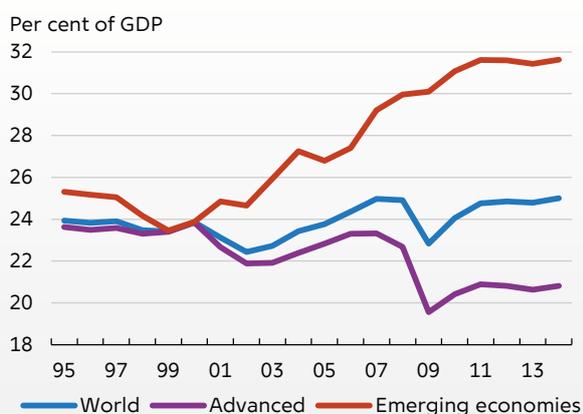
rising in the emerging market economies, driven, in particular, by strong growth in China. There may be several reasons for this development. A possible explanation is that, through FDI, firms in the advanced economies have relocated a share of their production to emerging market economies. Hence, outward FDI will tend to crowd out domestic real capital investment.

However, there are also other possible explanations for the decline in the investment ratio among the advanced economies, including technological advances that enable more effective utilisation of the existing capital stock, falling prices of certain types of investment, e.g. IT investment, and a larger services sector that reduces the capital intensity of the overall economy.⁷ Moreover, a substantial portion of the decrease is due to less residential investment, which is not affected by FDI.

Outward FDI may also be due to the expansion of a firm, which could have derived effects in the form of increased activity – also in the home country. Thus, there is no clear theoretical link between outward FDI and domestic real capital investment. Rather, this is an empirical issue.

Investment ratios

Chart 8



Note: Total gross investment as per cent of GDP calculated in market currency.

Source: IMF, World Economic Outlook Database, October 2015.

7 See e.g. Kramp and Pedersen (2015) for a review of investment drivers.

In Denmark, we do not see the decreasing trend in the investment ratio. The private sector's investment ratio excluding housing was in the range of 20-22 per cent of gross value added, GVA, in the years preceding the onset of the financial crisis, cf. Chart 9. In the years after the financial crisis, the ratio plunged to about 17 per cent of GVA. The decline was not offset by larger outward FDI. On the contrary, the investment ratio and outward FDI have, to some extent, moved in sync.

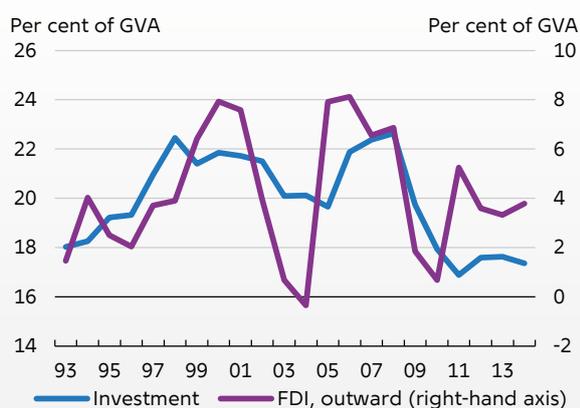
Thus, firms have increased their level of real capital investment, while at the same time expanding their outward FDI. This indicates that, over the last 20 years, Danish outward FDI has not been replacing or crowding out Danish firms' domestic real capital investment. This is supported by a large Danish trade surplus, indicating that production has not been relocated from Denmark. If anything, the international expansion of Danish firms will boost domestic real capital investment. We see no cross-country relationship between outward FDI and domestic real capital investment, cf. Box 3.

DANISH FDI AT INDUSTRY AND FIRM LEVEL

To assess whether a relationship exists between Danish outward FDI and domestic real capital investment, we examine the investment and outward FDI of Danish industries and firms.

Danish outward FDI and investment ratio, excluding housing

Chart 9



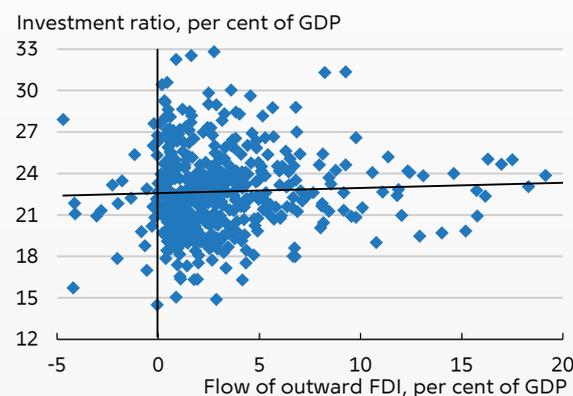
Note: Excluding the industries public administration, training and education, healthcare and raw material extraction. The investment ratio is excluding residential investment relative to gross value added, GVA.
Source: Statistics Denmark and Danmarks Nationalbank.

Real capital investment and outward FDI

Box 3

This box examines the relationship between investment ratios and outward FDI across 22 OECD countries over the period 1990-2014. A simple cross plot of investment ratios and outward FDI indicates that no statistically significant relationship exists between the two, cf. the chart below.

Outward FDI and investment ratios, 22 advanced economies, 1990-2014



Note: Simple cross plot of investment ratios and outward FDI.
Source: IMF, OECD, UNCTADSTAT and own calculations.

To examine the relationship statistically, a panel model is constructed in which the investment ratio is explained by outward FDI and a number of control variables:

$$Invk_t^i = \alpha FDI_ou_t^i + \xi X_t^i + \varepsilon_t^i,$$

where $Invk_t^i$ and $FDI_ou_t^i$ are the investment ratio and outward FDI, respectively, as per cent of GDP in country i at time t , and ξX_t^i is a vector of the control variables inward FDI, output gap and nominal interest rate. If outward FDI crowds out domestic real capital investment, $\alpha < 0$. The model is estimated both as Ordinary Least Squares, OLS, with cross-section and time dummies, with lagged values of the investment ratio (Arellano-Bond) and as differences. The estimations show that α is not significantly different from zero, regardless of the choice of model. Thus, outward FDI does not crowd out domestic real capital investment in the short term.

If relocation of capital takes place slowly over a number of years, it will not be captured by the estimated relationship. Thus, based on this analysis, it cannot be ruled out that outward FDI may help to explain a long-term trend of a decline in investment ratios in advanced economies.

Not all Danish industries engage in outward FDI. Thus, in 2014, 7 out of 19 industries accounted for 93 per cent of Danish FDI abroad. The same industries accounted for about half of the Danish gross investment (excluding housing) made in Denmark.

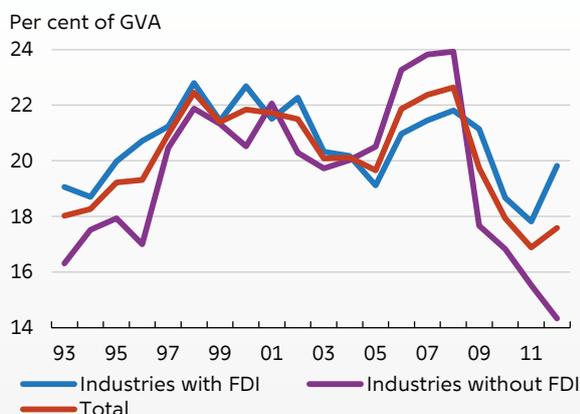
Industries with FDI largely have the same investment ratio as industries that do not engage in FDI, cf. Chart 10. Viewed over a business cycle, the pattern of the two industry groups is also approximately the same. This suggests that firms' decisions about investing in Danish real capital are not influenced by outward FDI decisions.

For quite some time, the development of the two groups has been largely the same. There has been no tendency for industries with outward FDI either to reduce or increase their real capital investment relative to other industries. This indicates that, in the longer term, Danish outward FDI neither crowds out nor stimulates domestic real capital investment.

Moreover, it appears that the current low level of investment is due mostly to low investment in industries without outward FDI, as they are very domestically oriented. This illustrates that investment in Denmark is hampered, in particular, by weak domestic demand.

At firm level, there are also no indications that firms with outward FDI differ from other firms in terms of real capital investment, cf. Box 4. Overall, FDI thus seems neither to crowd out nor stimulate real capital investment in Denmark.

Real capital investment ratios for industries with and without FDI Chart 10



Note: Investment ratios are calculated as the industries' real capital investment excluding residential investment relative to the industries' gross value added, GVA. Industries with FDI are industry, energy supply, trade, transport, finance and insurance as well as knowledge services. Industries without FDI are agriculture, forestry, fisheries, water supply and refuse collection, building and construction, hotels and restaurants, information and communication, property trading and rental, travel agencies, cleaning and other operational services, culture and recreation and other services and private households. Public administration, training and education and healthcare, along with raw material extraction, have been excluded from the calculations.

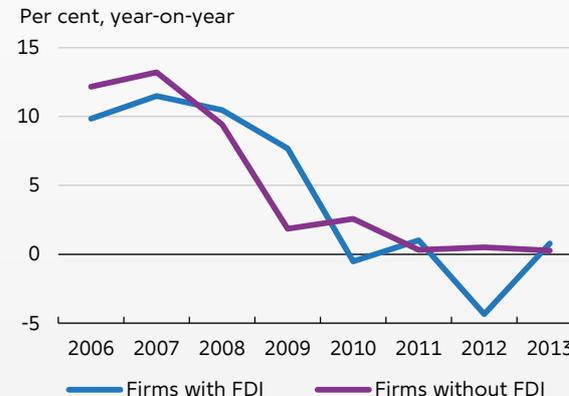
Source: Statistics Denmark, Danmarks Nationalbank and own calculations.

Investment by Danish firms, analysis of firm data

Box 4

The box compares the development in fixed assets (both intangible and tangible) for firms with and without outward FDI stocks. The development in fixed assets is a proxy for real capital investment. In the period 2006-13, the annual growth rate of the two groups' stocks of fixed assets is largely identical, cf. the chart below. Thus, there are no indications that the investment behaviour of firms with outward FDI is different from that of other firms.

Annual growth in firms' stocks of intangible and tangible fixed assets



Note: Annual growth as per cent.

Source: Experian, Danmarks Nationalbank and own calculations.

Data is constructed from own data on firms' inward and outward FDI, combined with data from Experian on firms' annual financial data. Firms with FDI are selected based on the criterion that, for at least one of the years 2005-13, the firm had a positive gross outward FDI stock, either in the form of equity or intercompany loans. The selection of both types of firms is held constant during the period in order to avoid annual shifts in investment resulting from changes in the number of firms. The two selections are 72,911 and 523 firms, respectively, without and with FDI. The original data set included 112,893 firms in 2005 and 165,720 firms in 2013.

FDI: BENEFITS AND CHALLENGES

As already described, FDI is an element of globalisation and enables firms to expand more than if they operate solely within the borders of a single country. This means, inter alia, that they can benefit from economies of scale. By producing and selling abroad, they are also able to access new knowledge and technology. These factors indicate that multinational corporations can be more productive than local firms. Based on a number of studies, the Danish Productivity Commission, among others, assesses (2013) that Danish firms with foreign subsidiaries and foreign-owned firms in Denmark are more productive than other Danish firms.

The public debate tends to focus more on whether outward FDI leads to job losses in Denmark. As discussed above, there are no indications that Danish outward FDI has crowded out domestic real capital investment. Hence, Danish outward FDI should not lead to Danish job losses, see also Andersen et al. (2013). This is consistent with the findings of other studies. Based on a literature review, Copenhagen Economics, among others, concludes (2010) that outward FDI has not markedly affected employment in the EU.

Although FDI does not affect overall employment, it may influence employment and wages in some industries. However, cross-industry and cross-education effects are difficult to separate from general technological advances, as automation may be the alternative to relocating production abroad, cf. Danish Economic Councils (2004). However, labour market flexibility and adaptability, along with ongoing skills upgrading, are required in both cases. Given Denmark's flexible labour market, high level of education and focus on continuing education and supplementary training, relative to many other countries Denmark is well poised to enjoy the benefits of FDI, while at the same time averting possible negative effects of FDI.

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